

CLAIMS

We claim:

- 1 1. A child safety cream dispenser, comprising:
 - 2 an elongated housing defining a cavity adapted for storing a
 - 3 topical preparation, the housing having at least one sidewall, an
 - 4 upper end having a dispensing outlet defined therein, and a
 - 5 bottom wall having an aperture defined therein, the housing
 - 6 having a passageway defined therein extending from the aperture
 - 7 defined in the bottom wall through the bottom wall and the
 - 8 sidewall to the upper end of the sidewall;
- 9 a piston slideable within and extending transversely across
- 10 the cavity and against the at least one sidewall in order to
- 11 prevent the preparation from falling below the piston;
- 12 a flexible piston shaft attached to the piston and slideable
- 13 within the passageway;
- 14 a plunger assembly received by an upper portion of the
- 15 passageway, the assembly having a trigger and a plunger rod
- 16 depending from the trigger;
- 17 a one-way ratchet mechanism extending for at least a portion
- 18 of the piston shaft and the plunger rod; and
- 19 a trigger release mechanism disposed in said trigger,
- 20 whereby the plunger assembly is prevented from advancing the
- 21 piston without releasing the trigger release mechanism.

1 2. The child safety cream dispenser according to claim 1,
2 wherein said passageway is a ``J'' shaped channel molded in the
3 bottom and sidewall of said housing.

1 3. The child safety cream dispenser according to claim 1,
2 wherein said trigger release mechanism includes a spring-biased
3 button disposed horizontally and extending beyond a portion of
4 said sidewall, whereby downward travel of said plunger rod
5 requires depressing said release button so that the button clears
6 said sidewall.

1 4. The child safety cream dispenser according to claim 1,
2 wherein said plunger assembly further includes a plunger bias
3 spring encircling an upper portion of said plunger rod below said
4 trigger.

1 5. The child safety cream dispenser according to claim 1,
2 further comprising a cap pivotally covering said dispensing
3 outlet, the cap being hinged to said plunger assembly, whereby
4 downward travel of said plunger assembly operates to pivot the
5 cap, thereby uncovering said dispensing outlet.

1 6. The child safety cream dispenser according to claim 1,
2 wherein said plunger rod and said piston shaft each have a series
3 of teeth extending along at least a portion of the length
4 thereof, the teeth of said depending plunger rod cooperatively
5 engaging the toothed portion of said upwardly extending piston
6 shaft.

1 7. The child safety cream dispenser according to claim 6,
2 wherein said plunger rod teeth comprise downward pitched notches
3 of ratchet teeth, and said piston shaft teeth comprise upward
4 pitched notches of ratchet teeth at a point of engagement of said
5 plunger rod teeth and said piston shaft teeth.

1 8. The child safety cream dispenser according to claim 1,
2 further comprising a liner disposed on the inside of said
3 housing.

1 9. The child safety cream dispenser according to claim 1,
2 wherein said dispensing outlet further comprises a ball valve

3 disposed at the top of said housing, the ball valve having a
4 plurality of vertically spaced teeth defined thereon, wherein
5 said ball valve is closed when said trigger is at rest, and said
6 ball valve is open when said trigger is depressed.

1 10. The child safety cream dispenser according to claim 9,
2 wherein said trigger and said ball valve have a plurality of
3 cooperatively engaging reciprocating ratchet teeth, whereby
4 pressure on said plunger trigger operates to rotate said ball-
5 valve open, and return of said trigger rotates said ball valve to
6 the closed position.

1 11. A child safety cream dispenser, comprising:
2 an elongated housing, the housing defining a cavity adapted
3 for storing a topical preparation therein, the housing having at
4 least one sidewall, an upper end having a dispensing outlet
5 defined therein, and a bottom wall having an aperture defined
6 therein, the housing having a passageway defined therein
7 extending from the aperture defined in the bottom wall through
8 the bottom wall and the sidewall to the upper end of the
9 sidewall;
10 a piston slidable within and extending transversely across
11 the cavity and against the at least one sidewall in order to
12 prevent the preparation from falling below the piston;
13 a flexible piston shaft attached to the piston and slidable
14 within the passageway;
15 a plunger assembly received by an upper portion of the
16 passageway, the assembly having a trigger, a plunger rod
17 depending from the trigger, and a plunger bias spring encircling
18 an upper portion of the plunger rod below the trigger;
19 a one-way ratchet mechanism disposed on at least a portion
20 of the piston shaft and the plunger rod; and
21 a trigger release mechanism disposed in said trigger,
22 whereby the plunger assembly is prevented from advancing the
23 piston.

1 12. The child safety cream dispenser according to claim 11,
2 wherein said one-way ratchet mechanism includes a series of teeth
3 extending along at least a portion of the length of said plunger
4 rod and said piston shaft, whereby the teeth of the depending
5 plunger rod cooperatively engages the toothed portion of the
6 upwardly extending piston shaft when said plunger assembly is
7 depressed, and said notched teeth pass without engaging when said
8 plunger assembly returns to its normal position.

1 13. The child safety cream dispenser according to claim 12,
2 wherein said plunger rod teeth comprise downward pitched notches
3 of ratchet teeth, and said piston shaft teeth comprise upward
4 pitched notches of ratchet teeth at the point of engagement of
5 said plunger rod teeth to said piston shaft teeth.